



Annual Performance Report Form

Facility Name: Battelle Columbus Operations - King Avenue

Performance Track ID #: A05-0038

Annual Performance Report #: 1

Reporting Year: 2001

Due Date: April 1, 2002

Section A

General Facility Information

To the extent possible, EPA will pre-complete items A.1-A.8 for you. Please ensure that the information in A.1-A.8 below is accurate, complete, and up to date. Please supply or revise any information as necessary and then check the box to the left of the item(s) to indicate where changes have been made. Items A.9 and A.10 cannot be pre-completed; please respond as directed in A.9 and A.10 below.

Did you make changes? If so, check box.

- A.1 ☐ Name of your facility: Battelle Columbus Operations - King Avenue
- A.2 ☐ Name of your parent company: Battelle Memorial Institute
- A.3 ☐ Facility contact person for the Performance Track program
Name: Mr./Mrs./Ms./Dr. Alan Hoberg
Title: Manager, Environmental and Quality Programs
Phone: (614) 424-5706 Fax: (614) 424-5706 E-mail: hoberg@battelle.org
- A.4 ☐ Facility's location
Street Address: 505 King Avenue
Street Address (cont.):
City/State/Zip Code: Columbus, Ohio 43201
- A.5 ☐ Facility's website address (if any): www.battelle.org
- A.6 ☐ Number of employees (full-time equivalents) who currently work in the facility:
☐ Fewer than 50 ☐ 50 - 99 ☐ 100 - 499 ☐ 500 - 1000 ☒ More than 1000
- A.7 ☐ Does your company meet the Small Business Administration definition of a small business for your sector? ☐ Yes ☒ No
- A.8 ☐ North American Industrial Classification System (NAICS) Code(s) that are used to classify business at the facility: 54171 _____
- A.9 ☐ In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? If so, please list them in the space below. ☐ Yes ☒ No

A.10



Please update the list of environmental requirements that apply to your facility. In the space below, indicate any changes that have taken place during this reporting period. If you have no changes to report, please write "No changes."

1. Oil Spill Prevention Control and Countermeasures (SPCC) (40 CFR 112) - no longer applies.
2. Classifications and Certifications of Operators and Superintendents of Industrial Wastewater Plants - no longer applies.
3. Collection, Handling, Processing of Sewage Sludge - no longer applies.
4. National Primary Drinking Water Standards (40 CFR 141) - no longer applies.
5. Permit Requirements for Appropriation/Use of Water from Surface or Subsurface Sources - no longer applies.
6. Standards for Owners and Operators of TSD Facilities (40 CFR 264) - no longer applies.
7. Underground Injection and Control Regulations, Criteria and Standards (40 CFR 144, 146) - applies

Section B

Environmental Management System

B.1

Environmental Management System Assessment. Please summarize EMS assessments conducted *during the year*. Attach additional sheets as necessary.

- a. Was an EMS audit or other assessment done by an independent third party?

☐ Yes ☒ No

If yes, please provide the *type* (e.g., ISO 14001 certification), the *scope*, and the *dates* (mo/yr) of each assessment.

- b. Was an internal or corporate EMS audit conducted? ☒ Yes ☐ No

If yes, please provide the *scope* and the *dates* (mo/yr) of each audit.

EMS Gap Analysis - identification of potential EMS Improvement opportunities - August 2001

Additional EMS elements were assessed during the following Responsible Care self-evaluations:

1. Process Safety Code - safe facility design, safe project work practices and process design, safe chemical operations, risk management, employee training, accident/incident investigation, February 2001
2. CAER Code - community awareness and emergency response issues, April 2001
3. Distribution Code - transportation and onsite distribution activities, June 2001
4. Pollution Prevention Code - waste management and release of pollutants, August 2001
5. Employee Health & Safety Code - health & safety of employees and visitors; identify and assess hazards, prevent unsafe acts and conditions, maintain and improve employee health, foster employee communication on health & safety issues, October 2001
6. Product Stewardship Code - include health, safety, and environmental considerations in the design, manufacturing, distributing, use, and disposal of our products, December 2001.
7. Internal independent assessment of the CAER Code - June 2001
8. Internal independent assessment of the Distribution Code - July 2001

- c. Was a compliance audit conducted? ☒ Yes ☐ No

If yes, please provide the *scope* and the *dates* (mo/yr) of each audit, and indicate *who* conducted the audit(s) (e.g., facility staff, corporate groups, third party).

1. Satellite Accumulation Area inspections - March 2001, June 2001, September 2001, December 2001 - facility staff.
2. Hazardous Waste Less-than-90-Day Accumulation Area Inspections - weekly January through December 2001 - facility staff
3. Discharge-to-Drain audit - April 2001 - facility staff
4. Underground and Above Ground Fuel Storage Tank audit - December 2001 - facility staff
5. Groundwater Monitoring - August 2001 and October 2001 - facility staff

d. (Optional) If you would like to describe any other audits or inspections that were conducted at your facility, please do so here.

1. Ohio EPA, Division of Hazardous Waste Management - inspected hazardous waste management practices - May 2001 - As a result of this inspection BCO ensured that administrative requirements/changes to Land Disposal Restriction Forms were implemented.
2. Ohio EPA, Air Division - inspected the facility's air emissions - June 2001- no environmental inspection findings.
3. Ohio Department of Health, Bureau of Radiation Protection - September 2001 - Inspected for compliance with facility's radioactive materials license. - no environmental inspection findings.
4. US Nuclear Regulatory Commission inspection - August 2001 and November 2001 - no environmental inspection findings.

Section B

(continued)

B.1

e. Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audits.

1. Groundwater Monitoring: In response to a slightly elevated MCL in one groundwater monitoring well, BCO-King Avenue re-sampled and re-analysed. The results were normal from the second sampling event. BCO uses the MCL for comparative purposes only because water in the area is not used for drinking.

2. Satellite Accumulation Area Inspections: Corrective actions involved communication and ongoing education/training with SAA Operators and tracking of corrective actions to completion.

3. Less-than-90-Day Hazardous Waste Accumulation Area Weekly Inspections: Findings were reported to the Hazardous Waste Area staff at the time of the inspection and corrective actions were completed immediately. Any corrective actions that could not be corrected immediately were completed in a timely manner and tracked to their completion.

4. Responsible Care CAER Code: Maintenance and Improvement Plans were developed to provide support and direction to the more "mature" codes. These plans will enhance continued improvement planning for practice-in-place codes. A work instruction for completing Responsible Care self-evaluations was developed and implemented to enhance consistency in code assessments. A more comprehensive oversight role for the Responsible Care Committee that simultaneously supports and reviews actions for each code area was developed. A new code coordinator from Corporate Communications was appointed to strengthen the community awareness aspects of the CAER code.

5. Responsible Care: In 2001, the Pollution Prevention, Distribution, and Employee Health & Safety Codes achieved full practice-in-place status by implementing previously identified corrective actions in their Responsible Care self-assessments. BCO is also working toward full implementation of the Responsible Care Product Stewardship and Process Safety Codes.

f. Has your facility corrected all instances of potential non-compliance and EMS non-conformance identified during your audits and other assessments?

☐ Yes ☒ No ☐ No such instances identified

If no, please explain your plans to correct these instances.

Contractors: A more comprehensive program for evaluating BCO contractor's onsite safety and environmental practices is currently under development.

Responsible Care Distribution Code: The Distribution Code Plan is currently under revision and will be reviewed on an annual basis. Three management practices will be re-evaluated in order to enhance the current implementation of carrier reviews and feedback. Distribution related work instructions will be updated or renewed as needed.

Operational Control Procedures: The facility operational control program will be strengthened by consolidating the decentralized best management practices currently applied to facility equipment management.

Environmental Aspects, Objectives, Targets, and Environmental Management Programs: The current identification process will be enhanced by creating a more formalized mechanism for review. Additional evaluation and establishment of environmental objectives in connection with some facility/research equipment will be completed.

Discharge-to-Drain: Administrative procedural improvements are in progress for Discharge-to-Drain processes.

g. When was the last Senior Management review of your EMS completed? *mo/yr* December 2001

Who headed the review?

Name: Mr./Mrs./Ms./Dr. Frank Hood

Title: BCO Vice President for Environment, Safety, Health, & Quality

Section B

(continued)

B.2 ISO 14001 Certification. Is your facility currently certified to ISO 14001? ☐ Yes ☒ No

B.3 Environmental Aspects Identification. When did your facility last conduct a systematic identification and/or review of your environmental aspects? *mo/yr* Reviews of various areas of the EMS / environmental aspects are conducted on a bi-monthly basis.

B.4 Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets. **You may limit the summary to environmental aspects that are *significant* and towards which *progress* has been made during the *reporting year*.** In cases where progress relates specifically to a Performance Track performance commitment, complete the *Environmental Aspect* column, but in the *Progress* column simply refer to the performance commitment tables in Section C, i.e. "See Section C." Attach additional sheets as necessary.

<i>Environmental Aspect</i>	<i>Progress Made This Year</i> (e.g., quantitative or qualitative improvements, activities conducted)
Total Energy Use	The following energy conservation measures were initiated/continued in 2001: 1. Energy efficient outdoor lighting upgrades at 2 entrances. 2. Repair/replace piping insulation. 3. Clean/inspect chiller condensor and evaporator tubes. 4. Energy Patrol, staff member tours facility and turns items off. 5. Upgrade variable frequency drive in chilled water pumps and house pumps in 5 buildings. 6. Switchgear upgrade with electronic metering and remote monitoring. 7. Install VAV Phoenix hood controls with zone occupancy sensors in 1 building. 8. Upgrade boiler flow recorders and install automatic boiler blowdown controls in 1 building. 9. Replace and upgrade 3 air handling units and DDC controls. 10. Install energy efficient T-5 lighting fixtures in 1 building. 11. Install insulated roll-up doors in 2 buildings. 12. Energy conservation messages distributed to staff.
Vulnerability and Potential for Releases	Even though Battelle Columbus Operations - King Avenue is not required to meet the standards found in 40 CFR 112, a Fuel Storage Tank Management Plan was written to deal with the possibility of oil spills at the facility.
Total Water Use	By using closed loop recirculating cooling and evaporative systems in 4 chiller cooling towers, BCO - King Avenue averted producing 35,649,230 gallons of wastewater.

Recycled/Reused Materials Use	Battelle Columbus Operations - King Avenue increased its tracking/management of refrigerant containing equipment to include not only chiller facilities and large refrigerated units but also individual refrigerators, freezer, incubators, centrifuges, water baths, and humidifiers, etc. This will increase our effectiveness in recycling/reusing the refrigerant at the end of the unit's lifecycle and will also facilitate proper disposal of all types refrigerated equipment. In addition new refrigerant recovery units were purchased for use in both chillers and small refrigerated units such as refrigerators and water baths. BCO - King Avenue recovered, reclaimed, or recycled approximately 141 pounds of various types of refrigerants.
Total Solid Waste	See Section C.
Total Solid Waste	See Section C.
Recycled/Reused Materials Use.	See Section C.
Recycled/Reused Materials Use	See Section C.

Section C

Environmental Performance Commitments

Please use the tables on pages 6-9 to summarize your facility's environmental performance against your Performance Track performance commitments. Complete only those boxes related to the baseline, current year, and performance commitment. If any of the boxes have been pre-completed for you, please verify the information. If you find information that is incorrect, cross it out and write in the correct information. **Leave blank any columns for future reporting years.**

C.1

Performance Commitment 1

a. Use this table to report data related to your first performance commitment.

Category (see page 16 of the instructions): Waste

Aspect (see page 16 of the instructions): Total Solid Waste

	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	1999	2001			2003
<i>Actual Quantity (per year)</i>	1788	2172			(optional)
<i>Measurement Units</i>	tons of disposed solid waste				
<i>Normalizing Factor*</i>	1.0	1.2			(optional)
<i>Basis for your Normalizing Factor*</i>	number of employees				
<i>Normalized Quantity* (per year)</i>	1788	1810			1430

*See pages 17-19 of the instructions for more information

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

Additional information was discovered after the application submittal and the baseline solid waste data was increased to 1788 tons. BCO-King Avenue experienced a 6% increase in solid waste generation to 1816 tons in 2000. This marked increase was due to extensive building renovations and subsequent staff office/laboratory moves during that year. Office and laboratory moves create opportunities for staff members to "clean house", resulting in significant increases in solid waste generation. In 2001, BCO used employee communication activities to further educate our staff on pollution prevention and waste minimization initiatives. Because of our extensive education campaign, BCO was able to reduce its solid waste generation to 1810 tons for the year. Although we are now moving in the right direction, BCO-King Avenue has decided to replace our solid waste reduction goal with a new performance commitment because USEPA has determined that this goal duplicates the increase recycling commitment detailed in Section C Performance Commitment 2.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).
WasteWise

Section C

(continued)

C.2 Performance Commitment 2

a. Use this table to report data related to your second performance commitment.

Category (see page 16 of the instructions): Waste					
Aspect (see page 16 of the instructions): Total Solid Waste					
	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	1999	2001			2003
<i>Actual Quantity (per year)</i>	517	976			(optional)
<i>Measurement Units</i>	tons of recycled materials				
<i>Normalizing Factor*</i>	1.0	1.2			(optional)
<i>Basis for your Normalizing Factor*</i>	number of employees				
<i>Normalized Quantity* (per year)</i>	517	813			1034
*See pages 17-19 of the instructions for more information					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The success of BCO - King Avenue's recycling performance commitment was dependant upon the successful use of a comprehensive employee education campaign. Staff education efforts used a wide variety of media to convey the recycling message. Battelle used an extensive internal website that included educational links to recycling strategies for both home and office use. Battelle also hosted an Environmental Fair for staff members. The fair gave employees the opportunity to learn about waste reduction and recycling from both local organizations and Battelle staff members. Additional educational efforts included quarterly newsletters that published environmental news and activities. Daily bulletins also advocated waste reduction and recycling ideas to staff members. Labels were placed on all recycling containers for easy reference regarding what materials could be recycled and who to contact with questions. Signs were posted in the cafeteria to promote the enhanced recycling opportunities that became available to BCO - King Avenue in 2001.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).

WasteWise

Section C

(continued)

C.3 Performance Commitment 3

a. Use this table to report data related to your third performance commitment.

Category (see page 16 of the instructions): Materials Use					
Aspect (see page 16 of the instructions): Recycled/Reused Materials Use					
	<i>Baseline</i> (as stated in your application)	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment</i> (the goal stated in your application)
<i>Calendar Year</i>	1999	2001			2003
<i>Actual Quantity</i> (per year)	41.6	39.9			(optional)
<i>Measurement Units</i>	tons of purchased recycled-content products				
<i>Normalizing Factor*</i>	1.0	1.2			(optional)
<i>Basis for your Normalizing Factor*</i>	number of employees				
<i>Normalized Quantity*</i> (per year)	41.6	33.3			87.6
*See pages 17-19 of the instructions for more information					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

The original 1999 baseline number for total tons of purchased recycled-content products should read 41.6 tons. In the first quarter of 2001, BCO - King Avenue was to begin purchasing recycled-content paper for all of the copiers, printers, and fax machines. However, the initiative did not actually start until the last quarter of the year. This late start resulted in the purchase of only 4.8 tons of recycled-content copier paper. In 2002, BCO-King Avenue will purchase significant amounts of copier paper in addition to our other recycled-content product purchasing initiatives. As such, we fully expect to attain our goal of 87.6 tons of purchased recycled-content products in 2003.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).
WasteWise

Section C

(continued)

C.4

Performance Commitment 4

a. Use this table to report data related to your fourth performance commitment.

Category (see page 16 of the instructions): Materials Use

Aspect (see page 16 of the instructions): Recycled/Reused Materials Use

	<i>Baseline (as stated in your application)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Performance Commitment (the goal stated in your application)</i>
<i>Calendar Year</i>	1999	2001			2003
<i>Actual Quantity (per year)</i>	1580	2156			(optional)
<i>Measurement Units</i>	pounds of reused chemicals				
<i>Normalizing Factor*</i>	1.0	1.2			(optional)
<i>Basis for your Normalizing Factor*</i>	number of employees				
<i>Normalized Quantity* (per year)</i>	1580	1797			1975
*See pages 15-17 of the instructions for more information					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

BCO - King Avenue successfully promoted the redistribution and reuse of unwanted chemicals internally to other Battelle staff members through use of its Virtual Chemical Warehouse program. The Virtual Chemical Warehouse permitted employees to offer surplus chemicals to other research projects and laboratories at BCO - King Avenue rather than having these items disposed of. In addition, Hazardous Waste Operations staff members personally solicited researchers to use the available items thus helping to significantly increase the amount of chemicals reused over previous years.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g., Energy Star, Project XL).
WasteWise

Section D

Public Outreach and Performance Reporting

D.1

Please briefly summarize the public outreach and reporting activities that your facility has conducted during the year. Feel free, but not obligated, to attach supporting materials (e.g., meeting agendas, public announcements). The Battelle Vice President of Corporate Communications and other company officials meet with neighborhood leaders and city officials quarterly to discuss new projects as well as items of concern to neighbors. When events or plans of key interest to neighbors occur, they are involved in the planning. Prior to major activities, calls are placed to key community leaders. BCO also uses ads in the major daily newspaper, question and answer features on a major commercial radio morning show to educate the public about the facility.

Due to the unfortunate 9-11 event, emergency preparedness and response received increased focused and attention, particularly with respect to community outreach. BCO conducts a full-scale, fully integrated, emergency exercise annually that tests the formal unified command structure, as well as participates in public sector emergency exercises as a means of recognizing public sector command and control authorities and the relationship between jurisdictions that may respond to a company incident. BCO emergency management personnel are members of the LEPC and are active in several LEPC committees. Public sector emergency management and response personnel are provided tours of BCO facilities to maintain current on operations and facility conditions. Invited participants are: fire service, local law enforcement, FBI, AFT, city, county and state emergency management agencies, public health, and medical personnel. Sharing information and experience is accomplished through participation in debriefings and providing critique comments following community integrated emergency exercises. BCO also teaches FEMA and Domestic Preparedness certificate courses with state and county EMA staff, health departments, law enforcement and fire departments; teaches the Integrated Emergency Management course with the state EMA staff; and shares experiences through classroom discussions. The combination of these activities form the basis for exchanging information and improving the emergency response program.

Since 9-11 BCO has led a new initiative with public sector emergency response organizations to develop and provide training to over 250 public sector emergency responders in the following areas: 1) Radiological Emergency Scene Management and 2) Radiological Instrumentation for Emergency Responders. BCO was also requested to develop and present training on Chemical/Biological Emergency Scene Management and become a resource member for the Terrorism Task Force. Finally, BCO has hosted luncheon workshops focusing on 9-11, response to 9-11, lessons learned from 9-11, and how business has changed because of 9-11.

D.2

Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Performance Report available to the public. Please check as many as are appropriate.

☒ Website (URL www.battelle.org)

☐ Open House

☒ Meetings

☐ Press Releases

☐ Community Advisory Panel

☐ Other

Section E

Self-Certification of Continued Program Participation

On behalf of Battelle Columbus Operations - King Avenue,
(name of my facility)

I certify that

- ◆ I have read and agree to the terms and conditions specified in *the National Environmental Performance Track Program Guide*. This facility, to the best of my knowledge, continues to meet all program criteria;
- ◆ I have personally examined and am familiar with the information contained in this Annual Performance Report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete;
- ◆ My facility has an environmental management system (EMS), as defined in the Performance Track EMS criteria, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- ◆ My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements; and the facility has corrected all identified instances of potential or actual noncompliance; and
- ◆ Based on the foregoing compliance assessments and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Performance Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior manager with responsibility for the facility and am fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is part of the National Environmental Performance Track program.

Signature/Date _____

Printed Name Mr./Mrs./Ms./Dr. Carl Kohrt

Title President and Chief Executive Officer

Phone Number/E-mail Address (614) 424-6562 / kohrtc@battelle.org

Facility Name Battelle Columbus Operations - King Avenue

Facility Street Address 505 King Avenue, Columbus, Ohio 43201

Performance Track Identification Number A05-0038

Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection of information is estimated to average 188 hours per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.